Reforestation and Hazard Mitigation Plan
Northeast Texas Ice Storm

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Introduction

The December 12-15th, 2000, and December 25th, 2000, ice storms were the most damaging to hit East Texas in recent history, causing $46 million in damage to the timber resources, and a total economic impact to the timber industry of $276 million. It caused severe physical hardships on the public, severely damaged the electric power distribution system, and disrupted peoples' personal lives enormously. This was immediate impact; longer term, the destruction to the timber resources is financially devastating to individual landowners. They not only lost the capital investment in establishing their timber, but precious time. Much of the timber destroyed represents ten to twenty years of investments for retirements, college educations, etc., which they can't get back. There is no crop insurance for timber, and much of the timber has been rendered worthless by the ice damage. The damaged stands are now subject to increased forest health and wildfire risks unless properly protected. The damaged trees and forests pose a serious wildfire threat to powerlines and improved property, as well as a threat to public safety in the communities.

Federal Assistance Requested

USDA Forest Service/National Resources Conservation Service

Reforestation

An estimated 110,000 acres of pine plantations on non-industrial private lands was moderately to severely damaged. Most of these plantings were established over the past twenty years, many with cost-share assistance provided by the federal Forestry Incentives Program (FIP), the private Texas Reforestation Foundation (TRe), or the federal Conservation Reserve Program (CRP). Plantings younger than three years of age will likely fully recover; those three to about ten years of age are a total loss; and those previously thinned 12-20 years of age were moderately to heavily damaged.

An estimated 70,000 acres will need FIP cost shares at 75 percent cost share.

FIP cost-share request (FP1 & FP2)	$11,800,000
FIP technical assistance	1,180,000
Total FIP	$12,980,000

It will take four to five years to deliver a program of this magnitude.

Seed and Seedlings

Planting 70,000 acres will require some 52.5 million seedlings of high genetic quality (minimum 1½ generation orchard material) geographically suited to this area. Timing is critical to have trees for the 2002 planting season. The seed will have to be stratified beginning March 1st . The Texas Forest Service has an opportunity to enter into a contract with a private nursery to produce 10-20 million seedlings, but will have to make the commitment on or before March 1, 2001. We are asking for $250,000 in federal nursery funds to boost seedling production.

Mediation on Damaged Mid-Rotation Stands

Most of the younger stands that were previously thinned suffered heavy damage. These stands can, in many cases, be cleaned-up of damaged trees and carried another ten years or more, allowing the trees to develop into small sawlogs and increasing the financial return significantly. Agency economists are developing financial decision models to help landowners make the decisions. An FP2 component should be included in the FIP funding to treat competing vegetation on these heavily thinned stands.

Forest Stewardship

With 286,000 acres impacted, the mitigation process will take up to five years to complete, assuming the work is properly funded. Agency foresters will provide technical assistance to forest landowners impacted by the ice storms. The agency will assist by developing forest stewardship plans that address reforestation needs, timber salvage and evaluating options in making decisions regarding the future of damaged timber stands. The foresters will address forest health issues, especially bark beetles in the damaged timber, and water quality with the timber salvage and reforestation activities. The agency will work with the forest products industry, private consultants, and loggers to help facilitate the maximum utilization possible for the damaged stands and minimize the economic loss to landowners.

The expert teams will consist of forest economists, tax experts, silviculturists, nursery specialists, entomologists, and local foresters, government and private.

Nursery and seed needs will be a challenge. After major droughts in four of the past five years, seed inventories of genetically superior stock are very limited. State and private nurseries do not have sufficient surplus capacity to handle this added workload. The state has a current proposal before the Texas Legislature to construct a new nursery. A large industrial nursery has offered, at least in the short-term, to expand production provided the state would contract the added production. Obviously, at this point, there are serious roadblocks to either happening, but these do represent real opportunities that must be pursued. Growing seedlings for retail sale to private landowners is financially risky. This is part of the reason the reforestation efforts will be slow beginning.

Urban and Community Forestry

Texas urban foresters surveyed nine communities that suffered damage to residential and public trees. The survey found tree damage from a low of 50 percent in Paris to 95 percent for most of the other Northeast Texas communities. The survey found over 5,800 public trees damaged or destroyed. It will cost an estimated $969,000 to repair or remove and replace these

trees. The USFS proposal includes technical assistance to the communities and community grants to share 50 percent of the cost to address the needs on public lands. The program will provide information to both communities and private property owners. Agency foresters will work with private arborists, municipal staffs, volunteer groups, and the Texas Agricultural Extension Service to help as many communities and private individuals as possible.

Forest Health

Federal funds will be used to assist in the detection and evaluation of forest pests or other forest health-related issues. Expected pest problems that will be monitored include bark beetles, reproduction weevils and pine tip moths. Insect traps will be set out in the spring to monitor bark beetle populations. Reforestation sites will be monitored for build-ups of potentially damaging insect pests. A sketch-map survey will be conducted in the late spring for detecting the presence of pest outbreaks. Should the need arise, emergency pest suppressions funds will be requested to address widespread pest control needs. Trees in urban areas will be monitored for hypoxlum disease in the damaged trees.

Federal Emergency Management Agency

Ice Storm Mitigation Strategies and Recommendations

"The goal of hazard mitigation is to reduce or eliminate risk to life and property from both natural and man-made hazards. Linked strongly with hazard mitigation are sustainability initiatives. Sustainability aims to develop comprehensive long-term planning solutions and identify opportunities to incorporate sustainability and livable community objectives FEMA and the states work together to plan and implement projects to achieve these goals by focusing on planning preventive measures at the local level. The success of hazard mitigation is dependent on partnering between local, state, and federal agencies and the private sector to educate and engage citizens to build disaster resistant and sustainable communities." (FEMA 1356-DR-Texas)

The Mission Assignment—Program Components

- An Aerial Flyover–The Texas Forest Service, either alone or together with Oklahoma and Arkansas, will conduct an aerial flyover of the damaged timber area to identify potential hazards and "hot spots", approximately 1.5 million acres in Texas. The photos will then be digitized and GIS formatted. Develop mitigation strategies from this data to apply in these areas.

- The Hazard Mitigation Technical Assistance Program (HMTAP) will be initiated to contract the development of reference material and coordinate with the Texas Forest Service to provide technical assistance to landowners and assist in the development of 404 projects, and together with the Extension Service, will undertake outreach to landowners and communities.

- The Texas Forest Service will apply for Hazard Mitigation Grant Program funds to assist landowners in implementing mitigation measures to reduce vulnerability to wildfires and the threat of hazard trees.

Mitigation objectives this proposal will address include:

I. Wildfire Threat

- Conduct an aerial flyover and digitize photographs
- In coordination with the Texas Agricultural Extension Service, conduct public awareness programs for wildfire mitigation to rural landowners.
- Landowner assistance
  - Establish two expert mitigation teams to assist landowners with mitigation plans and assist landowners with cost-share programs listed below. These teams will be backed-up with agency specialists in forest economics, GIS, pest control, and wildfire suppression specialists. It is estimated it will take three years to fully deliver this project.
  - Incentives to remove fuels
    - Landowners will be provided reimbursement of 75 percent of their cost to hire professional consultants to assist them in the salvage of damaged and destroyed trees. The objective is to remove the downed and damaged trees to reduce the threat of wildfire. Since the market value of this timber is low, help with landowner costs is crucial to getting much of this debris moved off the site in a commercial operation. Priority will be given to properties adjacent to powerlines and next to residences. The cost savings to removing the debris and weakened trees through commercial markets is enormous compared to having to pay private contractors to chip the material on site.
    - Landowners with heavily damaged pre-commercial pine stands will be offered 75 percent reimbursement on costs associated with mulching the woody debris to the ground. This will cause this material to decay more rapidly and retain higher moisture content, thus less likely to pose a high fire risk. Once treated, these lands are then suitable for re-establishing back to productive forests if the owner chooses. Priority will be given to tracts adjacent to powerlines and residences.

II. Structural and Vegetative Damage

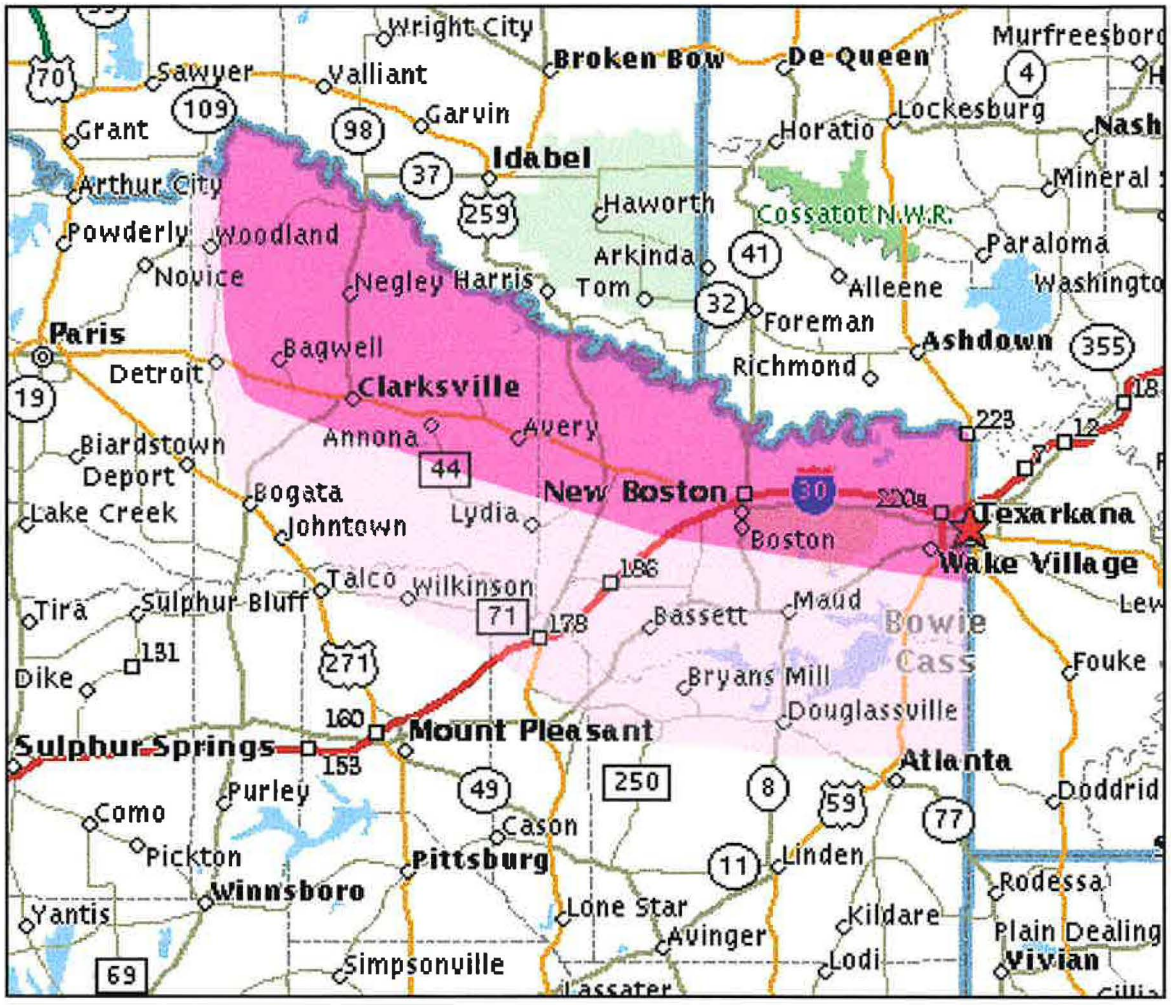
- Homeowner Assistance
  Expert teams will assist homeowners with the preparation of mitigation plans. There will be one expert team based out of Texarkana and assisted by the urban forestry staff in Dallas and College Station. This team will assist landowners receiving cost-share assistance to repair, remove, and replace hazardous trees. Landowners will be eligible for 75 percent cost reimbursement on trees covered in these mitigation plans. Priority will be given to trees that pose a public safety risk or risk to power lines or improved property.

FEMA Request

- Aerial flyover $170,000
- Public awareness 100,000
- Rural landowner assistance
  - Mitigation plans 1,845,600
  - Incentives to remove fuels
    - Clean-up older plantations 1,200,000
    - Mulching pre-commercial stands 3,360,000
  - Homeowner assistance
    - Mitigation plans 409,610
    - Incentive to repair, remove and replace hazardous trees 3,580,054

Northeast Texas Ice Damage

Christmas 2000 Event



Ice Damage

Moderate

Severe